Index of Claims



Application/Control No.

09/807,235

Examiner

Paula W. Klimach

Applicant(s)/Patent under Reexamination

SCHWENK ET AL.

Art Unit

2135

| <b>√</b> | Rejected |
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| 11       | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
|---|----------|
| o | Objected |

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| Cla  |  | <del> </del>  |              |              |          | Date         | -        | _            | · · · · ·    |                |  |  |
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| Final  | ig   | 6/10/05   |              |              |          |              |          |              |              |                |  |  |
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|  | 1  | ŀ   | _            |              | L        |              | <u> </u> |              |              | Ш              |  |  |
|  | 2  | -   |              |              |          | Щ            | ldash    |              | Ш            | Щ              |  |  |
|  | 1<br>2<br>3<br>4<br>5<br>6   | -   |              | $oxed{oxed}$ |          |              | L        |              |              | Ш              |  |  |
|  | 4  | 1   |              |              |          | Ш            | Ш        |              |              | Щ              |  |  |
|  | 5  | V   | L.           |              |          | _            |          |              | L            |                |  |  |
|  | 6  | ١v  |              |              | _        | _            | L.       | _            |              |                |  |  |
| <u> </u>   | 7  | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- |              |              | _        | L_           | L        |              | Щ            | Ш              |  |  |
|  | 8<br>9   | 1   |              |              | _        |              | <u> </u> |              |              | Щ              |  |  |
| L  | 9  | L   |              |              |          |              |          |              |              |                |  |  |
|  | 10   |   |              |              |          | _            | L_       |              |              |                |  |  |
|  | 11   |   |              | <u> </u>     |          | _            | ļ        |              |              | Ш              |  |  |
| <u> </u>   | 12   | $\vdash$  | <u> </u>     | ┝            | _        | <u> </u>     | <u> </u> | Ш            |              | Щ              |  |  |
|  | 10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23 | _   |              |              |          |              | L        | L            |              | Щ              |  |  |
|  | 14   |   |              |              | _        | _            |          | _            | L            | Щ              |  |  |
|  | 15   | _   |              | _            |          | <u> </u>     |          |              |              |                |  |  |
|  | 16   |   |              | L.           |          | ╙            | _        |              |              |                |  |  |
|  | 17   |   |              |              |          | L            | <u> </u> | _            |              |                |  |  |
|  | 18   |   |              | _            |          | <u> </u>     | L        | $\vdash$     |              | Ш              |  |  |
|  | 19   | _   | _            |              | _        | _            | _        | _            | <u> </u>     |                |  |  |
|  | 20   | <u> </u>  | <u> </u>     | <u> </u>     |          | <u> </u>     | ┞        | _            | _            |                |  |  |
|  | 21   | ऻ_  | _            | <u> </u>     | _        | <u> </u>     | ļ        |              | L            |                |  |  |
|  | 22   | _   | <u> </u>     | <u> </u>     |          | _            | ┡        |              | <u> </u>     |                |  |  |
|  | 23   | ⊢   | <u> </u>     | _            | <u> </u> |              | ┡        | <u> </u>     | $\vdash$     | -              |  |  |
|  | 24<br>25<br>26<br>27<br>28<br>29<br>30   | -   | <u> </u>     | ├            | _        | _            | _        | <u> </u>     | _            | -              |  |  |
|  | 25   | ├   | _            | ļ            |          |              |          |              |              |                |  |  |
|  | 26   |   | ├—           | ⊢            | _        | _            | -        | -            |              |                |  |  |
|  | 27   |   | _            | <u> </u>     | _        | _            | $\vdash$ | H            |              |                |  |  |
|  | 28   | ├-  |              | ⊢            | _        | _            | _        | <u> </u>     | <u> </u>     |                |  |  |
|  | 29   | <u> </u>  | <u> </u>     | L            | _        | _            | <u> </u> | -            | ⊢            |                |  |  |
|  | 30   | ⊢   | <u> </u>     | ⊢            | _        | L            | ├_       | -            |              |                |  |  |
| <u> </u>   | 31   | $\vdash$  | $\vdash$     | $\vdash$     | <u> </u> | -            | ├        | $\vdash$     | $\vdash$     | Н              |  |  |
| <b></b>  | 32   | $\vdash$  | -            |              |          |              | ├        | <u> </u>     | $\vdash$     | $\vdash$       |  |  |
|  | 32<br>33<br>34   | $\vdash$  | $\vdash$     | $\vdash$     |          | -            | $\vdash$ | $\vdash$     | -            | Н              |  |  |
|  | 34   | -   | -            |              | $\vdash$ | $\vdash$     | ├-       | H            | $\vdash$     |                |  |  |
| ⊢—   | 35<br>36   | $\vdash$  | $\vdash$     | $\vdash$     | $\vdash$ | $\vdash$     |          | $\vdash$     | -            | $\vdash$       |  |  |
| <u> </u>   | 35   | $\vdash$  | $\vdash$     | $\vdash$     | $\vdash$ |              | ├        | -            |              | $\vdash$       |  |  |
| <u> </u>   | 37   | -   | ├            | -            | ├        |              | ⊢        | $\vdash$     | H            |                |  |  |
| <del>                                     </del> | 38<br>39   | ├-  | $\vdash$     | $\vdash$     | $\vdash$ | ├—           | $\vdash$ | ⊢            | <del> </del> | Н              |  |  |
|  |  | ⊢   | <del> </del> | -            | ├—       | <del> </del> | -        | <u> </u>     | $\vdash$     |                |  |  |
| -  | 40   | ╁   | $\vdash$     | $\vdash$     | ⊢        | ├            | ⊢        | -            | $\vdash$     | $\vdash$       |  |  |
| ⊢-   | 41   | $\vdash$  | $\vdash$     |              | -        | ├            | $\vdash$ | $\vdash$     | ├            | Н              |  |  |
| <del> </del>                                     | 43   | $\vdash$  | $\vdash$     | $\vdash$     | ┝        | -            | -        | $\vdash$     | $\vdash$     | $\vdash\vdash$ |  |  |
| <u> </u>   | 44   | +-  | ├-           | -            | ⊢        | ⊢            | $\vdash$ | $\vdash$     | $\vdash$     | $\vdash\vdash$ |  |  |
|  | 45   |   | ├            | $\vdash$     | ├        | ├-           | $\vdash$ |              | $\vdash$     | $\vdash$       |  |  |
| <u> </u>   |  | $\vdash$  | $\vdash$     | $\vdash$     | $\vdash$ | ├-           | $\vdash$ | <del> </del> | $\vdash$     | Н              |  |  |
| <b>—</b>   | 46<br>47   | $\vdash$  | $\vdash$     | $\vdash$     | $\vdash$ | ⊢            | $\vdash$ | -            | -            | Н              |  |  |
| $\vdash$   | 48   | -   | ┝            | $\vdash$     | ┝        | $\vdash$     | -        | $\vdash$     | $\vdash$     | $\vdash$       |  |  |
| <u> </u>   |  | +-  | $\vdash$     | $\vdash$     | ├-       | $\vdash$     | -        | -            | ├            | $\vdash$       |  |  |
| <u> </u>   | 49   | -   | ├-           | ├-           | ├-       | ⊢            | -        | $\vdash$     | ⊢            | $\vdash$       |  |  |

| la       | im       |          |  |              |                  | Date         |          |              |              |              |   | Cla   | aim      |          |   |          |   | Date         | <del>-</del> |  |          |               |
|----------|----------|----------|--|--------------|------------------|--------------|----------|--------------|--------------|--------------|---|-------|----------|----------|---|----------|---|--------------|--------------|--|----------|---------------|
|          | Original | 6/10/05  |  |              |                  |              |          |              |              |              |   | Final | Original |          |   |          |   |              |              |  |          |               |
| 1        | 1        | ·        |  |              |                  |              |          |              |              |              |   |       | 51       |          |   |          |   |              |              |  |          |               |
| $\perp$  | 2        | _        |  |              |                  |              |          |              |              |              |   |       | 52       | Ш        |   | _        |   |              |              |  |          |               |
| 4        | 3        | _        | L  | $\perp$      |                  | L            |          |              | Ш            |              |   |       | 53       | Ш        |   | _        |   |              |              | Ш  |          |               |
| 4        | 4        | 1        |  | L            |                  | Ш            |          |              |              |              |   |       | 54       |          |   | _        |   |              |              |  |          |               |
| 4        | 5        | 1        |  |              |                  |              |          |              | _            |              |   |       | 55       | Щ        |   |          |   |              |              |  |          |               |
| 4        | 6        | 7        |  |              | _                | _            |          |              |              | L.           |   |       | 56       | <b>.</b> |   |          |   |              |              |  |          |               |
| 4        | 7        | 1        |  |              | _                | L_           |          |              | _            |              |   |       | 57       |          |   |          |   |              |              |  |          |               |
| 4        | 8_       | 1        |  |              |                  |              | _        |              |              | _            |   |       | 58       |          | _ |          |   |              |              |  |          |               |
| 4        | 9        |          |  |              |                  |              |          |              |              | <u> </u>     |   |       | 59       | Н        | _ |          |   | _            |              | Щ  |          |               |
| 4        | 10       |          |  | <u> </u>     | <u> </u>         | _            | _        | _            |              | $\vdash$     |   |       | 60       | Н        | _ |          |   |              |              |  |          |               |
| 4        | 11       | _        |  | <u> </u>     | _                | <u> </u>     |          |              |              | <u> </u>     |   |       | 61       | Н        | _ |          |   |              |              |  |          |               |
| 4        | 12       | $\vdash$ | _  | H            | _                | <u> </u>     | -        |              |              | <u> </u>     |   |       | 62       | Н        |   |          |   | -            |              | $\vdash$   |          | _             |
| 4        | 13       |          |  | <u> </u>     | _                | _            |          | _            |              | _            |   |       | 63       | Н        |   |          |   | _            | _            |  |          |               |
| 4        | 14       |          |  |              | <u> </u>         | -            |          | -            | _            | <u> </u>     |   |       | 64       | $\vdash$ |   |          |   |              |              | -  |          |               |
| 4        | 15       | -        |  |              | ├                | ⊢            |          |              |              | $\vdash$     |   | -     | 65       | Н        |   | -        |   |              | $\vdash$     | -  |          |               |
| $\dashv$ | 16       |          | H  | -            |                  | ⊢            | -        | -            |              | <u> </u>     |   |       | 66<br>67 | Н        | _ |          |   | $\vdash$     | -            | H  |          | _             |
| +        | 17       | -        | ⊢  | H            |                  | ⊢            | -        | -            | $\vdash$     | ┝            |   |       | 68       |          |   |          |   | -            | _            | Н  |          | _             |
| +        | 18<br>19 | H        | -  | ⊢            | -                | ├            | _        | $\vdash$     |              | ├            | { |       | 69       | Н        |   |          |   | $\vdash$     | _            | $\vdash$   | -        |               |
| $\dashv$ | 20       | -        | -  | H            | $\vdash$         | H            | _        | ┝            | -            | <del></del>  |   |       | 70       | $\vdash$ |   |          | _ |              |              | -  |          |               |
| +        | 21       |          | $\vdash$   | $\vdash$     | -                | ├─           | ┝        | $\vdash$     | -            |              |   |       | 71       | Н        | _ |          |   | Н            | -            |  | _        | -             |
| ┥        | 22       | $\vdash$ | $\vdash$   | -            | ├                | -            |          |              |              |              |   |       | 72       | Н        |   |          |   |              | -            |  | -        |               |
| ┨        | 23       | $\vdash$ |  | ┢┈           | -                | -            | -        |              |              |              |   |       | 73       | Н        |   |          |   |              |              | $\vdash$   |          | -             |
| +        | 24       | ┢        | $\vdash$   | -            | $\vdash$         | $\vdash$     | $\vdash$ | -            | $\vdash$     | ├─           | 1 |       | 74       | Н        |   | -        |   | -            |              |  |          | -             |
| ┥        | 25       | -        | $\vdash$   | ┢─           |                  | $\vdash$     | _        | -            | _            | <del> </del> |   |       | 75       | H        |   |          |   |              |              |  |          | -             |
| ┪        | 26       | ├─       | $\vdash$   | -            |                  |              |          |              | -            |              |   |       | 76       | H        |   |          |   |              | $\vdash$     |  |          | -             |
| ┪        | 27       | -        | -  | $\vdash$     | $\vdash$         |              | $\vdash$ |              | -            | -            | 1 |       | 77       | Н        | _ |          |   |              |              |  |          |               |
| 7        | 28       | _        | $\vdash$   | $\vdash$     | $\vdash$         |              |          |              | -            | ┢            | 1 |       | 78       | Н        |   |          |   |              | _            |  |          |               |
| 1        | 29       | -        | <del>                                     </del>   | $\vdash$     |                  |              |          |              |              |              |   |       | 79       | Н        | _ |          |   |              |              |  |          | $\overline{}$ |
| 7        | 30       | ┢        | <del>                                     </del>   | T            |                  |              |          |              |              |              | 1 |       | 80       | Н        |   | $\neg$   |   |              |              |  |          |               |
| 7        | 31       | T        | $\vdash$   | $\vdash$     | $\vdash$         | Н            | $\vdash$ |              |              | _            | 1 |       | 81       | H        | _ |          |   |              |              |  |          |               |
| ┪        | 32       | $\vdash$ |  | Т            |                  |              | _        |              |              |              |   |       | 82       | H        |   |          |   |              |              |  |          | _             |
| ٦        | 33       |          |  |              |                  |              |          |              |              |              | 1 |       | 83       |          |   |          |   |              |              |  |          |               |
| 1        | 34       | П        |  |              |                  |              |          |              |              |              | 1 |       | 84       |          |   |          |   |              |              |  |          |               |
| T        | 35       |          |  |              |                  |              |          |              |              |              | ] |       | 85       |          |   |          |   |              |              |  |          |               |
|          | 36       |          |  |              |                  |              |          |              |              |              |   |       | 86       |          |   |          |   |              |              |  |          |               |
|          | 37       |          |  | L            |                  |              |          |              |              |              |   |       | 87       |          |   |          |   | L            |              | $oxed{oxed}$                                     |          |               |
| ╛        | 38       | L        | $ldsymbol{ld}}}}}}$ | L            | 匚                | _            | <u> </u> | L            |              |              |   |       | 88       | Ш        |   |          |   | <u> </u>     |              | L.   |          |               |
| ╛        | 39       | L        |  | _            | _                |              | _        | $oxed{oxed}$ | L            | _            |   |       | 89       |          |   |          |   | ļ            |              | $oxed{oxed}$                                     |          |               |
| 4        | 40       | _        |  |              |                  |              | L        |              |              | _            |   |       | 90       | Ш        |   | _        |   | L            | Щ            | <u> </u>   |          |               |
| 4        | 41       | ᆫ        | L  | <u> </u>     | <u> </u>         | <u> </u>     | _        | <u> </u>     | <u> </u>     |              |   |       | 91       |          |   |          |   | L            | _            | _  |          |               |
| 4        | 42       | _        | <u> </u>   | _            | <u> </u>         | ļ            |          | <u> </u>     | <u> </u>     |              |   |       | 92       |          |   |          |   | <u> </u>     | _            |  |          | $\vdash$      |
| 4        | 43       | <u> </u> | <u> </u>   | <u> </u>     | <u> </u>         | ┞            | <u> </u> | <u> </u>     | <u> </u>     |              |   |       | 93       | Ш        |   | _        |   | <u> </u>     | <u> </u>     | $\vdash$   |          | _             |
| 4        | 44       |          | Ͱ  | <del> </del> | <del> </del>     | ├-           | $\vdash$ |              | $\vdash$     | $\vdash$     |   |       | 94       | Н        | _ |          |   | $\vdash$     | $\vdash$     | $\vdash$   | $\vdash$ | <u> </u>      |
| 4        | 45       | $\vdash$ | $\vdash$   | $\vdash$     | ⊢                | <del> </del> | <u> </u> | -            | $\vdash$     | $\vdash$     |   | -     | 95       | $\vdash$ |   |          |   | $\vdash$     | ├            | $\vdash$   |          | $\vdash$      |
| 4        | 46       | $\vdash$ | $\vdash$   | $\vdash$     | $\vdash$         | $\vdash$     | ⊢        | -            | <del> </del> | $\vdash$     | 1 | ļ     | 96       | $\vdash$ |   | $\vdash$ |   | <del> </del> | $\vdash$     | -  | Н        | $\vdash$      |
| 4        | 47<br>48 | -        | $\vdash$   | $\vdash$     | $\vdash$         | $\vdash$     | -        | $\vdash$     | $\vdash$     | $\vdash$     |   |       | 97<br>98 | Н        | - | -        | _ | $\vdash$     | $\vdash$     | -  | -        | $\vdash$      |
| +        | 49       | ├        | $\vdash$   | $\vdash$     | ├                | $\vdash$     | -        | -            | ├            | ├-           |   |       | 99       | Н        |   |          |   | $\vdash$     | $\vdash$     |  |          | -             |
| +        | 50       | -        | ⊢  | ┢            | <del>  -  </del> | $\vdash$     | -        | $\vdash$     | $\vdash$     | $\vdash$     |   |       | 100      | Н        |   |          | _ | $\vdash$     | -            | <del>                                     </del> | -        | $\vdash$      |
|          | -50      | 1        | Ь  | Ь            | Щ-               |              |          | Щ.           | L            | L            | J | L     | 1100     | ليا      |   |          |   | Щ.           |              |  |          | Щ.            |

| Cla   | Date              |          |                    |  |          |          |                                     |              |          |                 |
|-------|-------------------|----------|--------------------|--|----------|----------|-------------------------------------|--------------|----------|-----------------|
| Final | Original          |          |                    |  |          |          |                                     |              |          |                 |
|       | 101               |          |                    |  |          |          |                                     |              |          |                 |
|       | 102               |          |                    |  | -        |          | -                                   |              |          | Ш               |
|       | 103               |          |                    |  | _        |          | _                                   | _            |          | Ш               |
|       | 104               | _        |                    |  | _        | _        | _                                   |              |          | Щ               |
|       | 105<br>106        | _        |                    | _  |          | _        |                                     |              |          | Н               |
|       | 106               |          |                    |  | _        |          | _                                   | _            | _        | Ш               |
|       | 107               |          |                    |  | _        | _        | _                                   | _            | _        |                 |
|       | 108<br>109        |          |                    |  |          |          | _                                   |              | _        | _               |
|       | 110               |          |                    |  | _        |          | _                                   |              | _        | $\dashv$        |
|       | 111               |          | -                  |  |          |          | -                                   |              | -        | H               |
|       | 112               | $\vdash$ |                    | _  | _        |          | $\vdash$                            | _            |          | $\dashv$        |
|       | 113               | $\vdash$ | _                  | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$                            | H            | $\vdash$ | $\vdash \vdash$ |
|       | 113<br>114<br>115 | $\vdash$ | Н                  |  |          | $\vdash$ | $\vdash$                            | Н            | <u> </u> | $\vdash$        |
|       | 115               | H        | H                  | H  | H        | Н        |                                     | H            | $\vdash$ | $\vdash \vdash$ |
|       | 116               |          | $\vdash$           | Н  |          | $\vdash$ | -                                   |              |          | Н               |
|       | 117               | $\vdash$ | _                  | Н  |          | Т        |                                     |              | <u> </u> | H               |
|       | 118               |          |                    |  |          | $\vdash$ | $\vdash$                            |              |          | Н               |
|       | 118<br>119        |          |                    | Т  |          | $\vdash$ | $\vdash$                            |              |          |                 |
|       | 120               |          |                    |  |          | $\vdash$ |                                     |              |          | П               |
|       | 121<br>122        |          |                    |  |          |          |                                     |              |          |                 |
|       | 122               |          |                    | П  |          |          |                                     |              |          |                 |
|       | 123               |          |                    |  |          |          | Г                                   |              |          |                 |
|       | 124               |          |                    |  |          |          |                                     |              |          |                 |
|       | 123<br>124<br>125 |          |                    |  |          |          |                                     |              |          |                 |
|       | 126<br>127<br>128 |          |                    |  |          |          |                                     |              | <u> </u> | Щ               |
|       | 127               | L        |                    | <u> </u>   |          |          | <u> </u>                            | <u></u>      |          | Щ               |
|       | 128               |          |                    |  |          |          |                                     |              | _        | Щ               |
|       | 129<br>130        | L        | _                  | _  |          | L        | _                                   |              | _        | Щ               |
|       | 130               |          | <u> </u>           | <u> </u>   |          | <u> </u> | _                                   | <u> </u>     |          | Щ               |
|       | 131               |          |                    |  |          |          | <u> </u>                            | _            | <u> </u> | Ш               |
|       | 132               | _        |                    | <u> </u>   | _        | L        |                                     | <u> </u>     | <u> </u> | Щ               |
|       | 133               | <u> </u> | <u> </u>           |  | <u> </u> | ├        | ├                                   | ┝            | ⊢        | Н               |
|       | 134<br>135        | -        | -                  | -  | $\vdash$ | ├        | ├-                                  | <u> </u>     | <u> </u> | $\vdash\vdash$  |
|       | 136               | $\vdash$ | $\vdash$           | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$                            | $\vdash$     | ├-       | ${f H}$         |
|       | 137               |          | $\vdash$           | $\vdash$   | $\vdash$ | ┢╾       | <del> </del>                        | $\vdash$     | $\vdash$ | $\vdash \vdash$ |
|       | 138               | $\vdash$ | $\vdash$           | $\vdash$   | $\vdash$ | $\vdash$ | ┢                                   | $\vdash$     | ├        | Н               |
|       | 139               | $\vdash$ |                    | <del>                                     </del> | $\vdash$ | T        | $\vdash$                            | Н            | $\vdash$ | $\vdash \vdash$ |
|       | 140               | $\vdash$ | ┢                  | $\vdash$   |          | T        |                                     | Т            |          | Н               |
|       | 141               |          | Г                  | $\vdash$   |          |          |                                     | Г            |          | Н               |
|       | 142               |          |                    |  |          | T        |                                     |              | Г        | П               |
|       | 143               |          |                    |  |          |          |                                     |              |          |                 |
|       | 144               |          |                    |  |          |          |                                     |              |          |                 |
|       | 145               |          |                    |  |          |          |                                     |              |          |                 |
|       | 146               | $\Box$   | L                  | $\Box$   |          |          | Ĺ                                   |              | L_       |                 |
|       | 147               | <u> </u> | $oxedsymbol{oxed}$ | $oxedsymbol{oxed}$                               |          | _        | <u> </u>                            | $oxed{oxed}$ |          | Ш               |
|       | 148               | oxdot    | L                  | <u> </u>   | <u> </u> | _        | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |              | _        | Ш               |
|       | 149               | L        | <u> </u>           | L_   | <u> </u> | <u> </u> | <u> </u>                            | _            |          | Ш               |
| L     | 150               | L        |                    |  |          |          | L                                   | L            |          | Ш               |